

## 2 SEMI-ANNUAL MONITORING REPORT

In accordance with Title V Permit Standard Condition I.F and Condition 8366, Part 19, BAAQMD Regulation 8-34-411, and 40 CFR §60.757(f) in the NSPS, this Report is a Combined Title V Semi-Annual and Partial 8-34 Annual Report that is required to be submitted by TCRDF. The report contains monitoring data for the operation of the landfill gas collection and control system (GCCS). The operational records have been reviewed and summarized. The timeframe included in this report is November 1, 2017 to April 30, 2018. The following table lists the rules and regulations that are required to be included in this Combined Report.

**Table 2-1 Semi-Annual Report Requirements**

RULE	REQUIREMENT	LOCATION IN REPORT
8-34-501.1 §60.757(f)(4)	All collection system downtime, including individual well shutdown times and the reason for the shutdown.	Section 2.1, Appendices B & C
8-34-501.2 §60.757(f)(3)	All emission control system downtime and the reason for the shutdown.	Section 2.2, Appendix B
8-34-501.3, 8-34-507, §60.757(f)(1)	Continuous temperature for all operating flares and any enclosed combustor subject to Section 8-34-507.	Section 2.3, Appendix D
8-34-501.4, 8-34-505, 8-34-510	Testing performed to satisfy any of the requirements of this Rule.	Sections 2.4 & 2.10 Appendices E & G
8-34-501.5	Monthly landfill gas flow rates and well concentration readings for facilities subject to 8-34-404.	Sections 2.5 & 2.11 Appendix J
8-34-501.6, 8-34-503, 8-34-506, §60.757(f)(5)	For operations subject to Section 8-34-503 and 8-34-506, records of all monitoring dates, leaks in excess of the limits in Section 8-34-301.2 or 8-34-303 that are discovered by the operator, including the location of the leak, leak concentration in parts per million by volume (ppmv), date of discovery, the action taken to repair the leak, date of the repair, date of any required re-monitoring, and the re-monitored concentration in ppmv.	Sections 2.6 & 2.7, Appendix F
8-34-501.7	Annual waste acceptance rate and current amount of waste in place.	Section 2.8,
8-34-501.8	Records of the nature, location, amount, and date of deposition of non-degradable wastes, for any landfill areas excluded from the collection system requirement as documented in the GCCS Design Plan.	Section 2.9
8-34-501.9, 8-34-505, §60.757(f)(1)	For operations subject to Section 8-34-505, records of all monitoring dates and any excesses of the limits stated in Section 8-34-305 that are discovered by the operator, including well identification number, the measured excess, the action taken to repair the excess, and the date of repair.	Section 2.10, Appendices G & H

**Table 2-1 Semi-Annual Report Requirements (continued)**

<b>RULE</b>	<b>REQUIREMENT</b>	<b>LOCATION IN REPORT</b>
8-34-501.10, 8-34-508, §60.757(f)(1)	Continuous gas flow rate records for any site subject to Section 8-34-508.	Section 2.11, Appendices D & I
8-34-501.11, 8-34-509	For operations subject to Section 8-34-509, records of key emission control system operating parameters.	Section 2.2.2
8-34-501.12	The records required above shall be made available and retained for a period of five years.	Section 1.2
§60.757(f)(2)	Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.	Section 2.2.1
§60.757(f)(6)	The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), (c)(4) of §60.755.	Section 2.12
§60.10 (d)(5)(i)	Startup, Shutdown, Malfunction Events	Section 4, Appendices B & C

**2.1 COLLECTION SYSTEM OPERATION (BAAQMD 8-34-501.1 & §60.757(F)(4))**

Appendix A contains a map dated February 2, 2017 of TCRDF's existing GCCS. No wells were added to or removed from the collection system during the reporting period.

Appendix B includes all collection system downtimes and the reason for the shutdowns. The information contained in Section 2.1.2 and Appendix C includes the individual well shutdown times and the reason for each shutdown.

**2.1.1 COLLECTION SYSTEM DOWNTIME**

During the period covered in this report, the landfill gas (LFG) collection system was not shut down for more than five (5) days on any one occasion. Pursuant to BAAQMD Regulation 8-34-113, Limited Exemption, Inspection and Maintenance, the total downtime is summarized below:

**Table 2-2 Collection System Downtime**

<b>PERIOD</b>	<b>DOWNTIME (HOURS)</b>
2017 Calendar Year	26.13
November 1, 2017 – April 30, 2018	15.50
2018 Year to Date	4.30

A Flare SSM Log that lists dates, times, and lengths of shutdowns for the reporting period is included in Appendix B.

### 2.1.2 WELL DISCONNECTION LOG

During the reporting period, zero (0) wellfield SSM events occurred. In addition, zero wells (out of a possible 3) remain disconnected at the end of the reporting period, pursuant to BAAQMD Regulation 8-32-116.2 (Limited Exemption, Well Raising).

A Wellfield SSM Log that lists dates, times, and lengths of disconnections for the reporting period is included in Appendix C.

### 2.2 EMISSION CONTROL DEVICE DOWNTIME (BAAQMD 8-34-501.2 & §60.757(F)(3))

The emission control system consists of the A-3 Enclosed Flare. No bypassing of the control system or emissions of raw LFG occurred. A Flare SSM Log for the A-3 Flare is included in Appendix B. Total downtime is summarized in the following table:

Table 2-3 Flare A-3 Downtime

PERIOD	DOWNTIME (HOURS)
2017 Calendar Year	26.13
November 1, 2017 – April 30, 2018	15.50
2018 Year to Date	4.30

#### 2.2.1 LFG BYPASS OPERATIONS (§60.757(f)(2))

Title 40 CFR §60.757(f)(2) is not applicable at the TCRDF because no bypass line is installed. LFG cannot be diverted from the control equipment.

#### 2.2.2 KEY EMISSION CONTROL OPERATING PARAMETERS (BAAQMD 8-34-501.11 & 8-34-509)

BAAQMD Regulations 8-34-501.11 and 8-34-509 are not applicable to the A-3 Flare because the A-3 Flare is subject to continuous temperature monitoring as required by BAAQMD Regulation 8-34-507 and §60.757(f)(1).

### 2.3 TEMPERATURE MONITORING RESULTS (BAAQMD 8-34-501.3, 8-34-507, & §60.757(F)(1))

The combustion zone temperature of the flare is monitored with thermocouples and recorded with a Yokogawa paperless chart recorder. There were no continuous recorder device SSM events during the reporting period. As shown in Appendix D, there were no periods of missing temperature data for the flares during the reporting period.

Title V Permit Condition Number 8366 Part 6 states that the minimum combustion zone temperature, averaged over a 3-hour period, shall be equal to the average combustion zone temperature determined during the most recent complying source test minus 50°F,

provided that the minimum combustion zone temperature is not less than 1,450°F. Pursuant to Part 6, the following temperature limits applied during the reporting period:

**Table 2-4 Applicable 3-Hour Temperature Limits**

Test Date	Report Submitted	Average Temperature During Test (°F)	3-hr Minimum Temperature (°F)
2/23/2017	4/4/2017	1,593	1,543
2/14/2018	3/27/2018	1,596	1,546

**2.4 MONTHLY COVER INTEGRITY MONITORING (BAAQMD 8-34-501.4)**

The Monthly Cover Integrity Monitoring Reports are included in Appendix E. The cover integrity monitoring was performed on the following dates:

- November 20, 2017
- December 20, 2017
- January 29, 2018
- February 28, 2018
- March 29, 2018
- April 26, 2018

**2.5 LESS THAN CONTINUOUS OPERATION (BAAQMD 8-34-501.5)**

The TCRDF does not operate under BAAQMD Regulation 8-34-404 (Less Than Continuous Operation) and therefore is not required to submit monthly LFG flow rates.

**2.6 SURFACE EMISSIONS MONITORING (BAAQMD 8-34-501.6, 8-34-506, & §60.757(F)(5))**

The TCRDF is a closed landfill as defined by 8-34-223. As of the First Quarter 2016 event completed March 1, 2016, the Site has achieved three consecutive quarters with no Surface Emissions Monitoring (SEM) exceedances. Therefore, the TCRDF may now reduce the frequency of SEM events to annually. The 2018 annual SEM occurred during the reporting period on March 18, 2018.

Flame ionization detectors (FID) were used during the SEM event to monitor the landfill surface according to the SEM Map. Any areas suspected of having emission issues by visible observation were also monitored. Prior to all monitoring events, the FID used was zeroed and calibrated using zero air and 500 ppmv methane calibration gas.

There were zero (0) locations with exceedances detected during either monitoring event. No corrective actions or follow-up monitoring was required. Copies of the SEM Reports are included in Appendix F.

The next SEM event is due by March 31, 2019. Any exceedance detected during annual monitoring will require the Site to revert to quarterly monitoring.

## **2.7 COMPONENT LEAK TESTING (BAAQMD 8-34-501.6 & 8-34-503)**

Quarterly Component Leak Testing using FIDs, pursuant to 8-34-503, occurred during the reporting period on the following date:

- Fourth Quarter 2017 – November 13, 2017
- First Quarter 2018 – February 16, 2018

No component leaks were discovered during either test event. Quarterly LFG Component Leak Check logs are presented in Appendix F.

## **2.8 WASTE ACCEPTANCE RECORDS (BAAQMD 8-34-501.7)**

The TCRDF is closed and all final closure documentation has been received. No degradable waste was accepted during the reporting period. The total waste in place is 12.77 million tons.

## **2.9 NON-DEGRADABLE WASTE ACCEPTANCE RECORDS (BAAQMD 8-34-501.8)**

TCRDF does not have non-degradable waste areas that are excluded from the collection system. Therefore, BAAQMD Regulation 8-34-501.8 is not applicable.

## **2.10 WELLHEAD MONITORING DATA (BAAQMD 8-34-501.4 & 8-34-505)**

Wellhead monitoring was performed on a monthly basis pursuant to 8-34-505. The wellhead concentration readings for the reporting period are included in Appendix G. Each well was monitored in accordance with the following requirements:

- 8-34-305.1 - Each wellhead shall operate under a vacuum.
- 8-34-305.2 - The LFG temperature in each wellhead shall be less than 55 degrees Celsius (°C) (131°F).
- 8-34-305.4 - The oxygen (O<sub>2</sub>) concentration in each wellhead shall be less than 5 percent by volume.

The wellhead monitoring was performed on the following dates:

- November 28 and 30, 2017
- December 12 and 13, 2017
- January 23, 2018
- February 1, 2018
- March 27 and 30, 2018
- April 18 and 19, 2018

**Wellhead Deviations (BAAQMD 8-34-501.9 & §60.757(f)(1))**

Wellfield deviations from BAAQMD Regulation 8-34-305 during the reporting period are summarized in Table 2-5. The Wellfield Deviation Log is attached in Appendix H.

**Table 2-5 Wellfield Deviation Summary**

Well ID	Exceedance Date	Exceedance Value	Re-monitoring Date	Compliance Date and Reading	Days in Exceedance
No well exceedances during the reporting period.					

% – percent O<sub>2</sub> – oxygen

**2.11 GAS FLOW MONITORING RESULTS (BAAQMD 8-34-501.10, 8-34-508, & §60.757(F)(1))**

Flow is measured using a Kurz flow meter installed on March 12, 2015. The LFG flow is displayed and digitally recorded with a General Electric data panel and Yokogawa Digital Recorder, which records flow every two minutes. The flow data readings are saved to a compact flash card. The flow meter is maintained and calibrated pursuant to the manufacturer’s recommendations. The flare flow meter meets the requirements of BAAQMD Regulation 8-34-508 by recording at least every 15 minutes. The flow records for the flare are available for review at the TCRDF. As shown in Appendix D, no flare temperature or flow deviations occurred from November 1, 2017 to April 30, 2018.

Title V Permit Condition Number 8366, Part 11 limits daily heat input to 1,800 Million British thermal units (MMBTU) per day and annual heat input to 657,000 MMBTU. Table 2-6 below is a summary of the total LFG flow for the reporting period of November 1, 2017 to April 30, 2018. Monthly and daily flow rates are presented in Appendix I.

**Table 2-6 LFG Input to A-3 Flare**

Emission Control Device	Average Flow (scfm)	Average CH <sub>4</sub> (%)	Total LFG Volume (scf)	Total CH <sub>4</sub> Volume (scf)	Heat Input (MMBtu)	Max Daily Heat Input (MMBtu)
A-3 Flare	1,316	47.34	341,903,637	161,922,310	164,027	968

(1) The methane content was determined from the February 23, 2017 source test (4/4/2017 - 3/26/2018) and the February 14, 2018 source test (3/27/2018 - current).

**2.12 COMPLIANCE WITH §60.757(F)(6)**

*“The date of installation and the location of each well or collection system expansion added pursuant to (a)(3), (b), (c)(4) of §60.755.”*

At the end of the reporting period, the GCCS consisted of thirty-eight (38) vertical LFG collection wells. No wells were added to or removed from the collection system during the reporting period.

### **2.13 COMPLIANCE WITH TITLE V PERMIT CONDITION 8366, PART 12**

Title V Condition Number 8366, Part 12 requires annual monitoring for hydrogen sulfide using a Draeger tube. The 2017 Annual sample concentration was 100 ppm<sub>v</sub> (collected July 18, 2017). Data from the monitoring event is presented in Appendix K.

### **2.14 COMPLIANCE WITH TITLE V PERMIT CONDITION 2593 FOR S-24**

Daily records were maintained and totaled as required by Condition 2593 Part 4. Concrete accepted at S-24 did not exceed 150,000 tons during any consecutive 12-month period. Combined concrete and asphalt accepted and removed from the site did not exceed 2,500 tons in any day.

## **4 STARTUP, SHUTDOWN, MALFUNCTION (SSM) REPORT**

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### **SSM Report for the GCCS at the Tri-Cities Recycling and Disposal Facility**

The NESHAP contained in 40 CFR Part 63, AAAA for MSW landfills to control hazardous air pollutants include the regulatory requirements for submittal of a semi-annual report (under 40 CFR 63.10(d)(5) of the general provisions) if an SSM event occurred during the reporting period. The reports required by 40 CFR §63.1980(a) of the NESHAP and 40 CFR §60.757(f) of the NSPS summarize the GCCS exceedances. These two semi-annual reports contain similar information and have been combined as allowed by 40 CFR §63.10(d)(5)(i) of the General Provisions.

NESHAP 40 CFR Part 63, AAAA became effective on January 16, 2004. Those SSM events that occurred during the NSPS semi-annual reporting period (November 1, 2017 to April 30, 2018) are reported in this section. The following information is included as required:

- During the reporting period, 5 flare SSM events occurred. The cause, time and duration of each event are presented in the Flare SSM Log, which is contained in Appendix B.
- During the reporting period, 0 wellfield SSM events occurred to allow for active filling, repairs, and well raising. The time and duration of each event are presented in the Wellfield SSM Log, which is contained in Appendix C.
- During the reporting period, 0 recorder SSM events occurred.
- In all, 5 events were consistent with the standard operating procedures contained in the SSM Plan.
- No exceedances of any applicable emission limitation in the landfill's NESHAP (63.10(d)(5)(i)) occurred.
- Revisions of the SSM Plan to correct deficiencies in the landfill operations or procedures were neither required, nor prepared (§63.6(e)(3)(viii)).

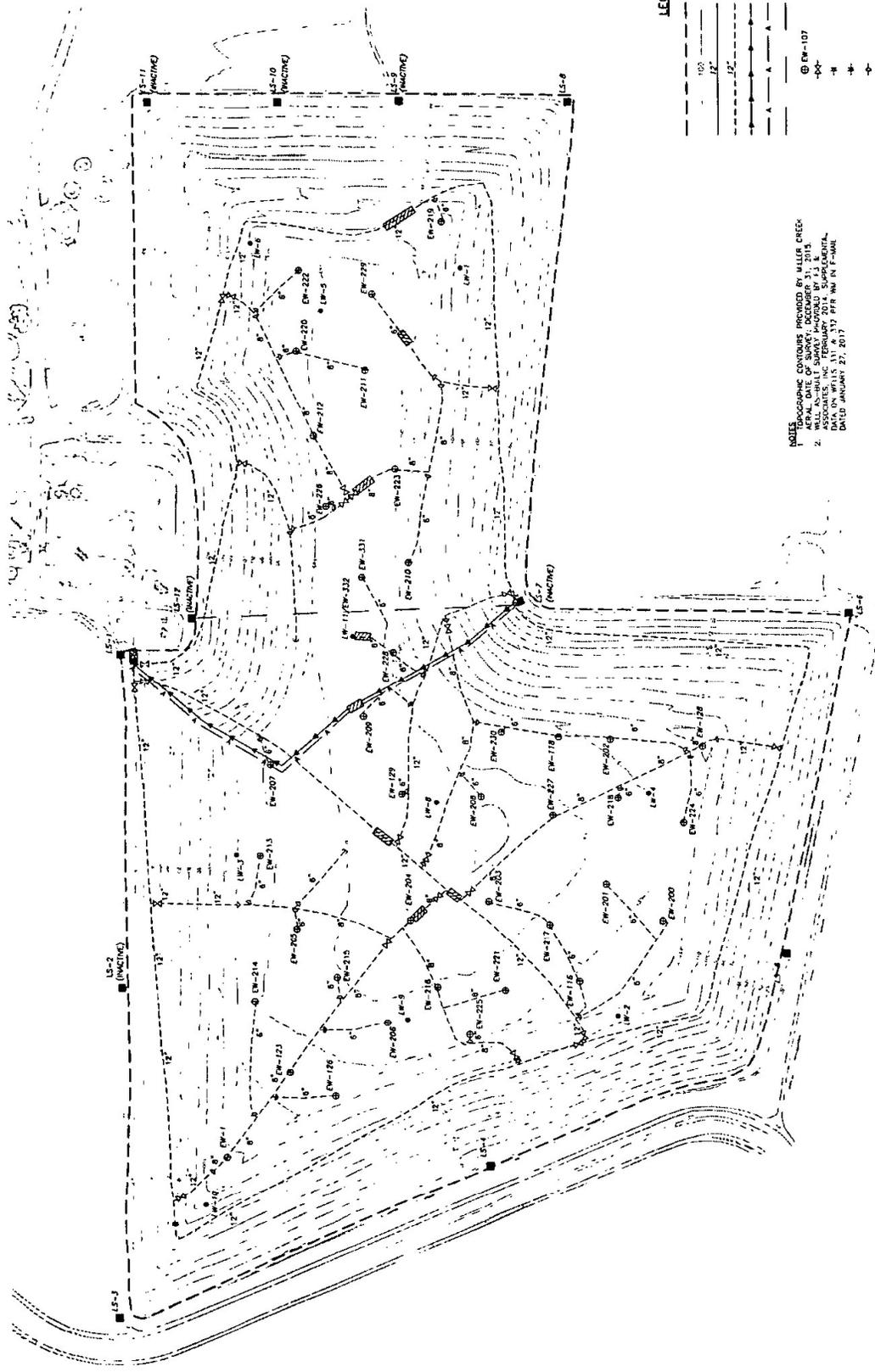
**I certify the following:**

**Based on information and belief formed after reasonable inquiry, information on the startup, shutdown, malfunction forms, all accompanying reports, and other required certifications are true, accurate, and complete.**

*Patrick Madej*  
\_\_\_\_\_  
Signature of Responsible Official

**May 29, 2018**  
\_\_\_\_\_  
Date

**Patrick Madej**  
\_\_\_\_\_  
Name of Responsible Official



**NOTES**  
 1. TOPOGRAPHIC CONTOURS PROVIDED BY MILLER CREEK  
 2. AERIAL DATE OF SURVEY, DECEMBER 31, 2015  
 3. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED  
 4. ASSOCIATES, FEBRUARY 2014, SUPPLEMENTAL  
 DATA ON WELLS 117 & 119 PFR NO. IN F-MAIL  
 DATED JANUARY 27, 2017

**LEGEND**

- EXISTING SOLID WASTE BOUNDARY
- - - EXISTING 10' CONTOUR
- - - EXISTING 12" PFC HEADER - ABOVE GROUND
- - - EXISTING 12" PFC HEADER - BELOW GROUND
- - - EXISTING CONDENSATE FORCE MAIN
- - - EXISTING AIR FORCE MAIN
- - - EXISTING HORIZONTAL COLLECTOR
- ⊕ EW-107
- ⊕ EXISTING LVE EXTRACTION WELL
- ⊕ EXISTING CONTROL VALVE
- ⊕ EXISTING BLEND FLANGE
- ⊕ EXISTING FLANGE CONNECTION
- ⊕ EXISTING REDUCER
- ⊕ EXISTING ROAD CROSSING
- ⊕ EXISTING LEACHATE SUMP
- LS-4 (INACTIVE)
- LS-2 (INACTIVE)
- LW-1
- EXISTING LEACHATE LEVEL MONITORING WELL

SHEET NO. 1  
 PROJECT NO. 170146

TRI-CITIES RECYCLING AND DISPOSAL FACILITY  
 FREMONT, CALIFORNIA



NO.	DATE	DESCRIPTION	BY	CHECKED BY	DATE
1	02/09/17	ISSUED FOR PERMIT	...	...	...

Update on 6/16/2017 - EW-331 and EW-332 decommissioned

Update on 6/16/2017 - EW-331 and EW-332 decommissioned

**TRI-CITIES RECYCLING AND DISPOSAL FACILITY  
CONTROL DEVICE DOWNTIME LOG**

Event No.	Check Applicable Event	Device	(1) Event Start Date/Time	(2) Event End Date/Time	(3) Duration (Hrs)	(4) Cause or Reason	(5) Applicable Regulation	(6) Type of Event	(7) Procedures Used (a),(b)	(8) Did Steps Taken Vary From (7)		(9) Did Event Cause Any Emission Limit Exceedance ?		(10) Describe Emission Standard(s) Exceeded (b)	Completed By	(11) Date Entry Completed
										Yes (Go to 9)	No	Yes (Go to 10)	No			
1	<input checked="" type="checkbox"/> Startup	A-3 Flare	11/1/17 17:00	11/1/17 17:02	0.03	All control devices were shut down due to a site-wide power outage. System inspected and restarted.	<input checked="" type="checkbox"/> 113: Inspection/Maintenance	Manual (Go to 7)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No		Mike Chan	11/1/2017
	<input checked="" type="checkbox"/> Shutdown		11/1/17 18:22	11/1/17 18:24	0.03		<input checked="" type="checkbox"/> 116: Well Raising	Automatic (Go to 9)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
	<input checked="" type="checkbox"/> Malfunction		12/4/17 19:02	12/4/17 19:04	0.03		<input checked="" type="checkbox"/> 117: Gas Collection	Automatic (Go to 9)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
2	<input checked="" type="checkbox"/> Startup	A-3 Flare	12/5/17 4:32	12/5/17 4:34	0.03	Low air pressure. System inspected and restarted.	<input checked="" type="checkbox"/> 113: Inspection/Maintenance	Manual (Go to 7)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No		Mike Chan	12/5/2017
	<input checked="" type="checkbox"/> Shutdown		12/20/17 12:54	12/20/17 12:56	0.03		<input checked="" type="checkbox"/> 116: Well Raising	Automatic (Go to 9)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
	<input checked="" type="checkbox"/> Malfunction		12/20/17 13:14	12/20/17 13:16	0.03		<input checked="" type="checkbox"/> 117: Gas Collection	Automatic (Go to 9)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
3	<input checked="" type="checkbox"/> Startup	A-3 Flare	1/12/18 9:26	1/12/18 9:28	0.03	Manual shutdown for flare station maintenance	<input checked="" type="checkbox"/> 113: Inspection/Maintenance	Manual (Go to 7)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No		Mike Chan	1/12/2018
	<input checked="" type="checkbox"/> Shutdown		1/12/18 11:10	1/12/18 11:12	0.03		<input checked="" type="checkbox"/> 116: Well Raising	Automatic (Go to 9)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
	<input checked="" type="checkbox"/> Malfunction		3/29/18 13:16	3/29/18 13:18	0.03		<input checked="" type="checkbox"/> 117: Gas Collection	Automatic (Go to 9)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
5	<input checked="" type="checkbox"/> Startup	A-3 Flare	3/29/18 15:50	3/29/18 15:52	0.03	All control devices were shut down due to a site-wide power outage. System inspected and restarted.	<input checked="" type="checkbox"/> 113: Inspection/Maintenance	Manual (Go to 7)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No		Mike Chan	3/29/2018
	<input checked="" type="checkbox"/> Shutdown		11/1/17 17:00	11/1/17 17:02	0.03		<input checked="" type="checkbox"/> 116: Well Raising	Automatic (Go to 9)	Procedures 1 to 3	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			
	<input checked="" type="checkbox"/> Malfunction		11/1/17 18:22	11/1/17 18:24	0.03		<input checked="" type="checkbox"/> 117: Gas Collection	Automatic (Go to 9)	Procedures 1 to 4	Yes (Go to 9)	No	<input checked="" type="checkbox"/> Yes (Go to 10)	No			

(a) STANDARD OPERATING PROCEDURES

**Shutdown**

**Procedure No.**

**Procedure**

1. Ensure that there are no unsafe conditions present, contact manager immediately
2. Initiate shutdown sequence below by one or more of the following (Note date and time in Section 1 of form above)
  - a. Press Emergency Stop if necessary
  - b. Close On/Off switch(es) or Push On/Off button(s)
  - c. Close adjacent valves if necessary
3. Observe that system achieves normal shutdown ranges for levels, pressures, and temperatures (Note date and time in Section 2 of form above)

**Startup**

**Procedure No.**

1. Ensure that there are no unsafe conditions present
2. Ensure that the system is ready to start by one of the following:
  - a. Valves are in correct position
  - b. Levels, pressures, and temperatures are within normal starting range
  - c. Alarms are cleared
  - d. Power is on and available to control panel and ready to energize equipment.
  - e. Emergency stop is de-energized
3. Initiate start sequence (Note time and date in section 1 of form above)
4. Observe that system achieves normal startup ranges for levels, pressures, and temperatures (Note time and date in Section 2 of form above)

**Malfunction**

EQUIPMENT	PURPOSE	MAJ FUNCTION EVENT	COMMON CAUSES	PROCEDURE NO. TYPICAL RESPONSE ACTIONS
<b>LFG Collection and Control System</b>				
Blower or Other Gas Mover Equipment	Applies vacuum to wellfield to extract LFG and transport to control device	Loss of LFG Flow Blower Malfunction	-Flame arrester housing deterioration -Automatic valve problems -Blower failure (e.g. belt, motor, impeller coupling, seizing, etc.) -Loss of power  -Extraction piping failure -Condensate knock-out problems -Extraction piping blockages	1 Repair blockages in extraction piping 2 Clean flame arrester 3 Repair blockages in extraction piping 4 Verify automatic valve operation, compressed air nitrogen supply 5 Notify power utility, if appropriate 6 Provide utilize auxiliary power source, if necessary 7 Repair Settlement in Collection Piping 8 Repair Blower 9 Activate back-up blower, if available 10 Clean knock-out pot 11 Drain knock-out pot
Extraction Wells and Collection Piping	Conduits for extractions and movement of LFG flow	Collection well and pipe failures	-Break crack in header or lateral piping -Leaks at wellheads, valves, flanges, Test -Collection piping blockages  -Problems due to settlement (e.g. pipe separation, deformation, development of low points)	12 Repair leaks or breaks in later or wellheads 13 Follow procedures for loss of LFG flow blower malfunction 14 Repair blockages in collection piping 15 Repair settlement in collection piping
Blower or Other Gas Mover Equipment And Control Device	Collection and control of LFG	Loss of electrical power	-Force majeure Act of God (e.g., lightning, flood, earthquake, etc.) -Area-wide or local blackout or brown-out  -Interruption in service (e.g. blown service fuse) -Electrical line failure -Breaker trip -Transformer failure -Motor starter failure trip -Chlorides of power -Problems in electrical panel  -Damage to electrical equipment from on-site operations	16 Re-install, repair, or replace piping 17 Check reset breaker 18 Check repair electrical panel components 19 Check repair transformer 20 Check repair motor starter 21 Check repair electrical line 22 Test impedance to various equipment 23 Contact electricity supplier 24 Contact contract electrician 25 Provide auxiliary power (if necessary)
LFG Control Device	Combusts LFG	Low temperature conditions at control device	-Problems with temperature monitoring equipment -Problems failure of thermocouple and/or thermocouple wiring -Change of LFG flow -Change of LFG quality -Problems with air louvers -Problems with air fuel controls -Change in atmospheric conditions	26 Check repair temperature monitoring equipment 27 Check repair thermocouple and/or wiring 28 Follow procedures for loss of flow blower malfunction 29 Check adjust louvers 30 Check adjust air fuel controls
LFG Control Device	Combusts LFG	Loss of Flame	-Problems failure of thermocouple -Loss change of LFG flow -Loss change of LFG quality -Problems with air fuel controls -Problems failure of flame sensor -Problems with temperature monitoring equipment	31 Check repair temperature monitoring equipment 32 Check repair thermocouple 33 Follow procedures for loss of flow blower malfunction 34 Check adjust air fuel controls 35 Check adjust repair flame sensor 36 Check adjust LFG collectors
Flow Monitoring Recording Device	Measures and records gas flow from collection system to control	Malfunctions of Flow Monitoring Recording Device	-Problems with orifice plate, pitot tube or other in-line flow measuring device  -Problems with device controls and/or wiring -Problems with chart recorder	37 Check adjust repair flow measuring device and/or wiring 38 Check repair chart recorder 39 Replace paper in chart recorder
Temperature Monitoring Recording Device	Monitors and records combustion temperature of enclosed combustion device	Malfunctions of Temperature Monitoring Recording Device	-Problems with thermocouple -Problems with device controls and/or wiring -Problems with chart recorder	40 Check adjust repair thermocouple 41 Check adjust repair controller and/or wiring 42 Check adjust repair electrical panel components 43 Check repair chart recorder 44 Replace paper in chart recorder
Control Device	Combusts LFG	Other Control Device Malfunctions	-Control device smoldering (i.e. visible emissions) -Problems with flare isolation -Problems with pilot light system -Problems with air louvers -Problems with air fuel controllers -Problems with thermocouple -Problems with burners -Problems with flame arrester  -Alarmed malfunction conditions not covered above -Unalarmed conditions discovered during inspection not covered above	45 Site-specific diagnosis procedures 46 Site-specific responses actions based on diagnosis 47 Open manual louvers 48 Clean pilot orifice 49 Clean/lean flame arrester 50 Refill propane supply 51 Check repair pilot sparking system

(b) For each permit limit exceedance complete an "SSM Plan Departure Form". Notify BAAQMD verbally or by fax within 2 working days after commencing the actions that an event inconsistent with the SSM Plan and which resulted in an exceedance of an applicable emission permit has occurred. Follow up in writing to the agency within 7 working days after the end of the event.